FIG.1

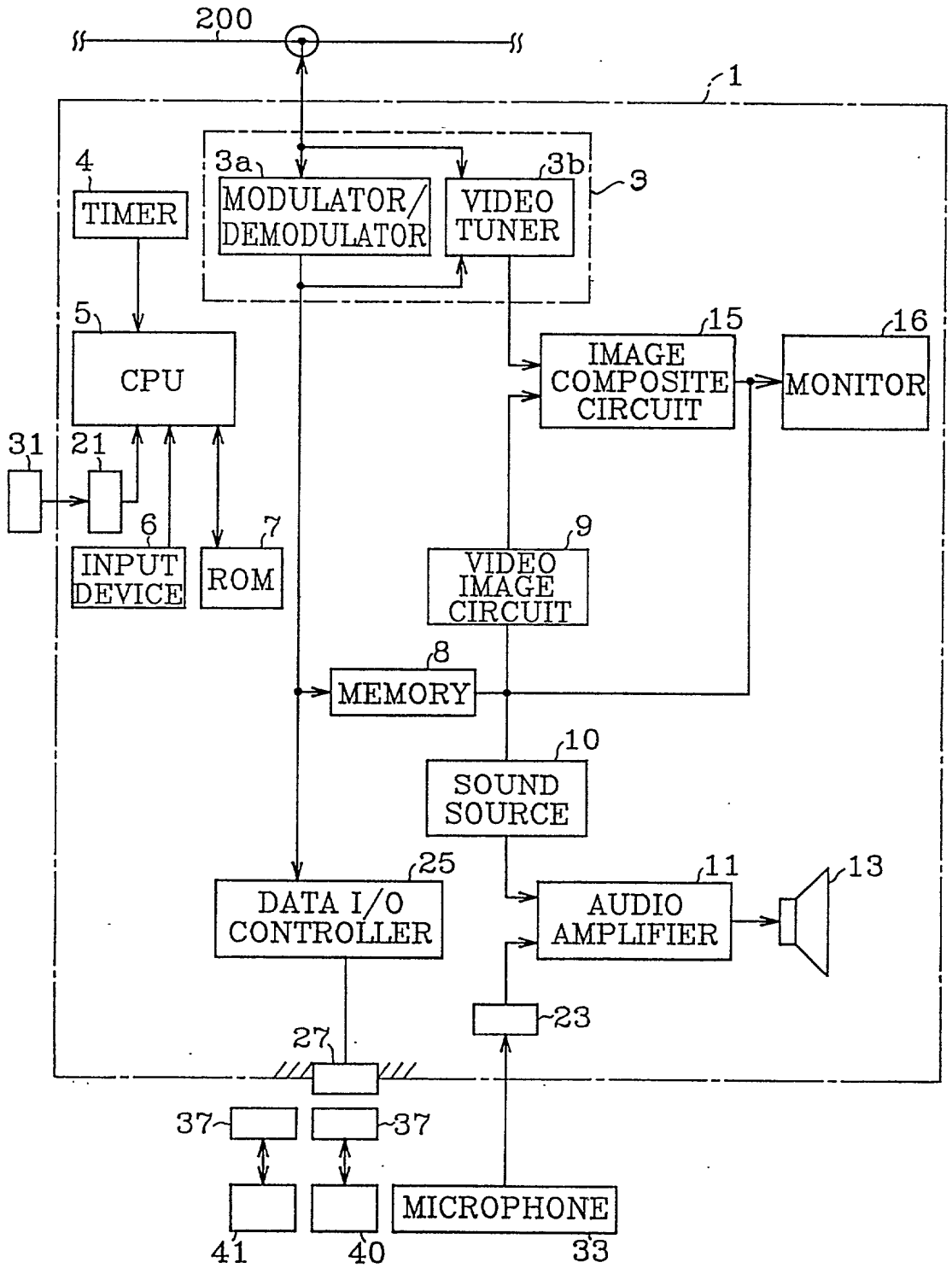

200
1
4
TIMER
3a
MODULATOR/
DEMODULATOR
3b
VIDEO
TUNER
3
5
CPU
15
IMAGE
COMPOSITE
CIRCUIT
16
MONITOR
31
21
6
INPUT
DEVICE
7
ROM
9
VIDEO
IMAGE
CIRCUIT
8
MEMORY
10
SOUND
SOURCE
25
DATA I/O
CONTROLLER
11
AUDIO
AMPLIFIER
13
23
27
37
37
41
40
MICROPHONE
33

FIG.2

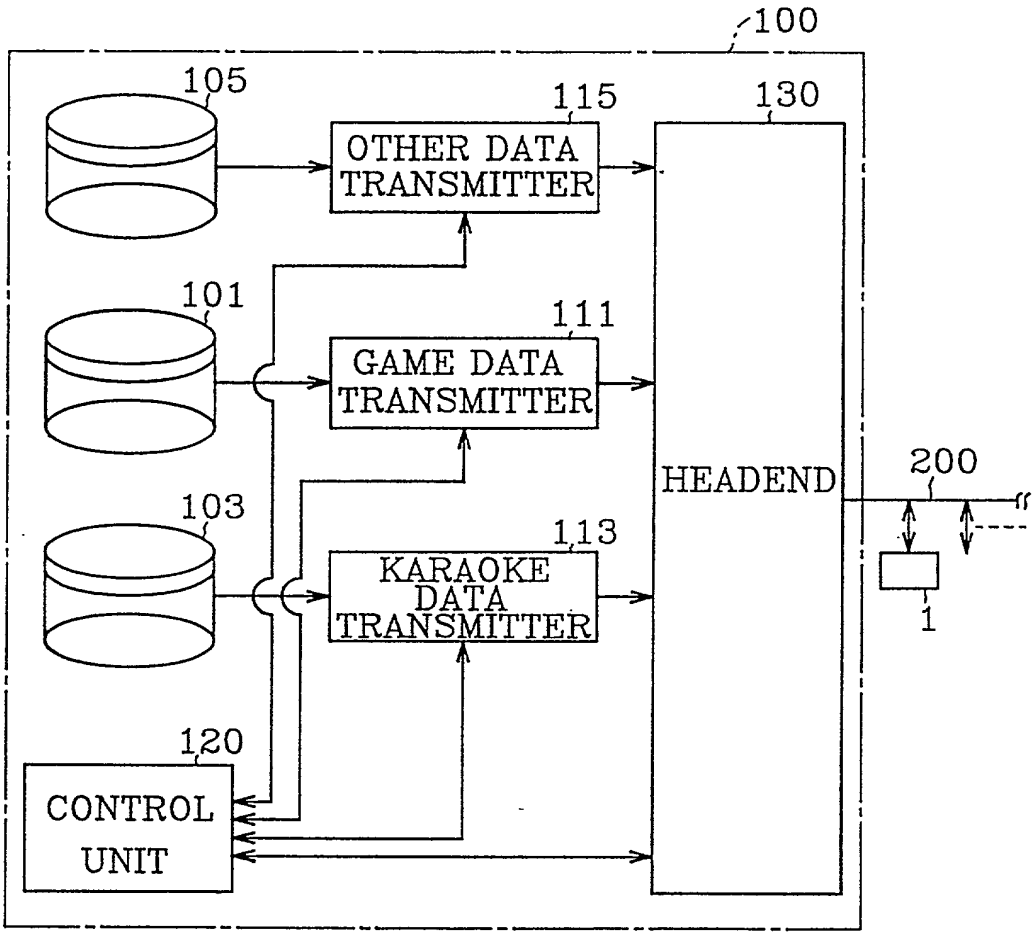

100
105
115
130
OTHER DATA TRANSMITTER
101
111
GAME DATA TRANSMITTER
HEADEND
200
103
113
KARAOKE DATA TRANSMITTER
1
120
CONTROL UNIT

FIG.3

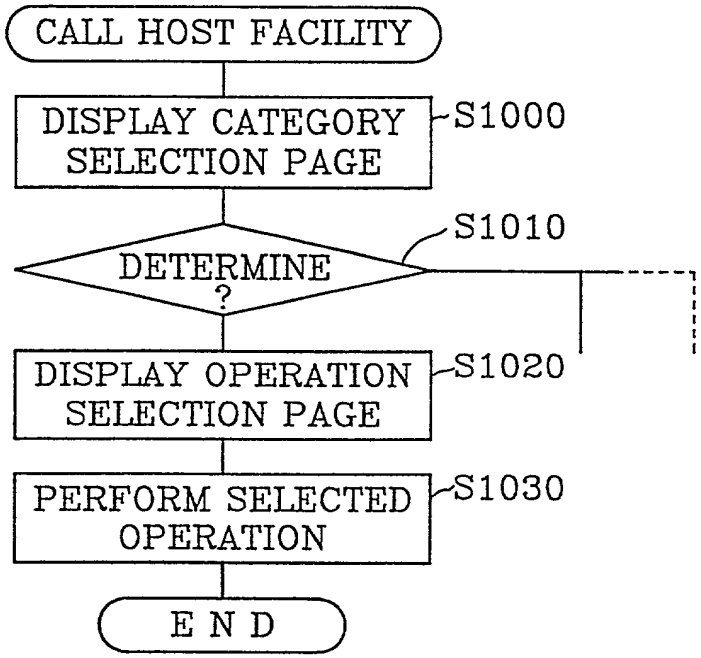

CALL HOST FACILITY
DISPLAY CATEGORY SELECTION PAGE
S1000
DETERMINE ?
S1010
DISPLAY OPERATION SELECTION PAGE
S1020
PERFORM SELECTED OPERATION
S1030
E N D

FIG.4

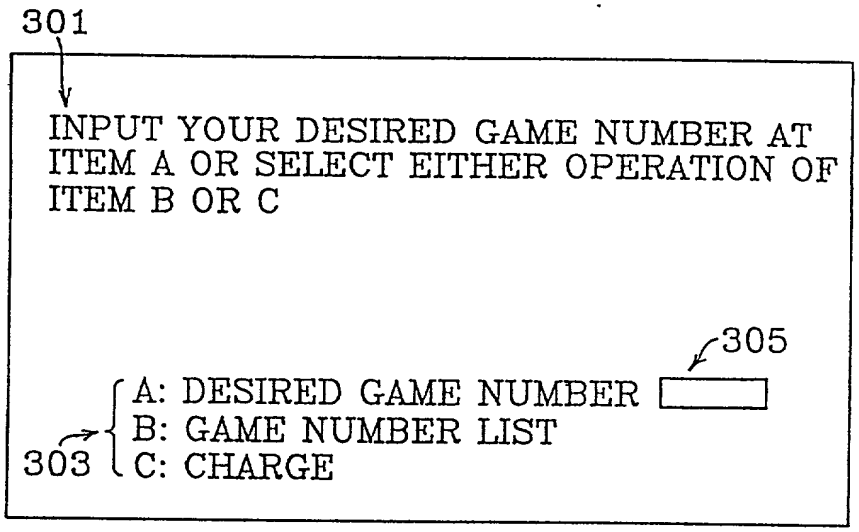
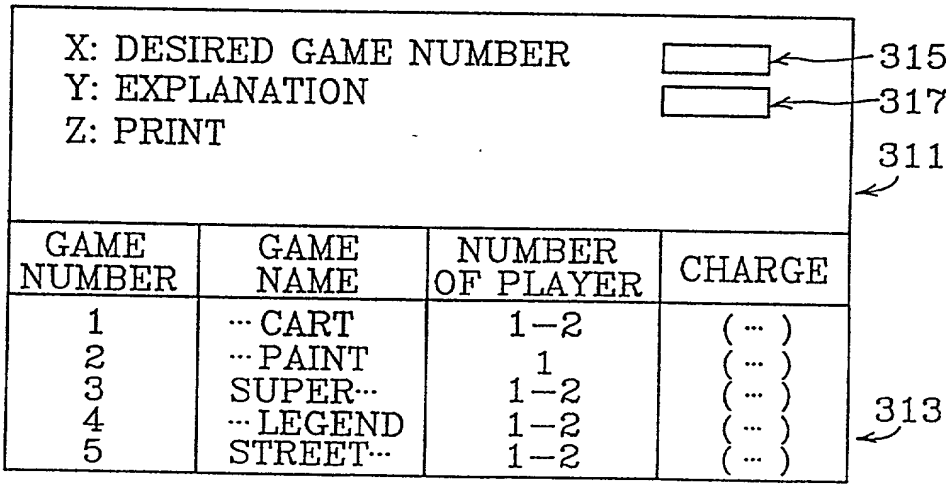


FIG.5



GAME NUMBER	GAME NAME	NUMBER OF PLAYER	CHARGE
1	···CART	1−2	(···)
2	···PAINT	1	(···)
3	SUPER···	1−2	(···)
4	···LEGEND	1−2	(···)
5	STREET···	1−2	(···)

FIG.6

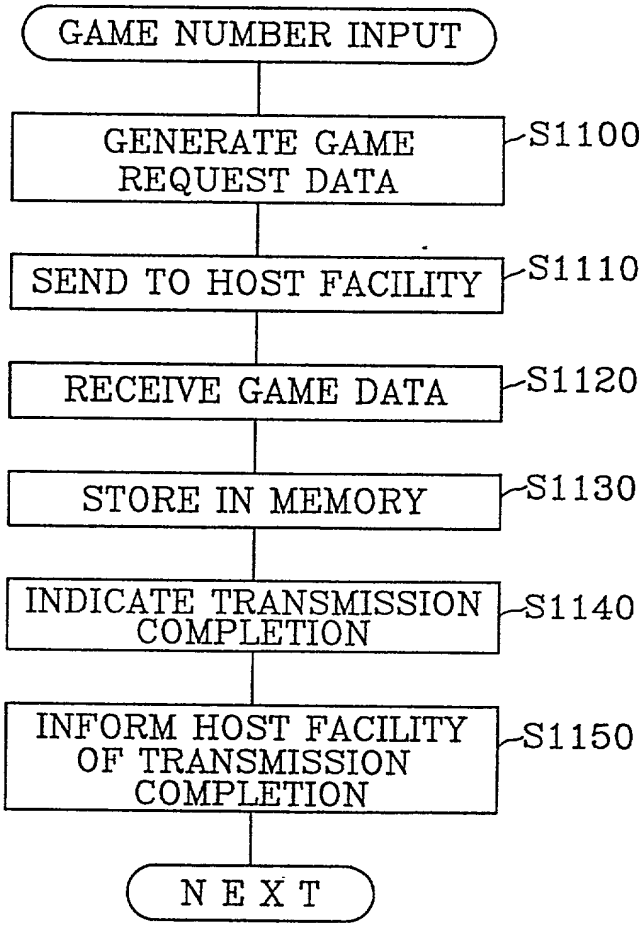

GAME NUMBER INPUT
GENERATE GAME REQUEST DATA
S1100
SEND TO HOST FACILITY
S1110
RECEIVE GAME DATA
S1120
STORE IN MEMORY
S1130
INDICATE TRANSMISSION COMPLETION
S1140
INFORM HOST FACILITY OF TRANSMISSION COMPLETION
S1150
N E X T

FIG.7

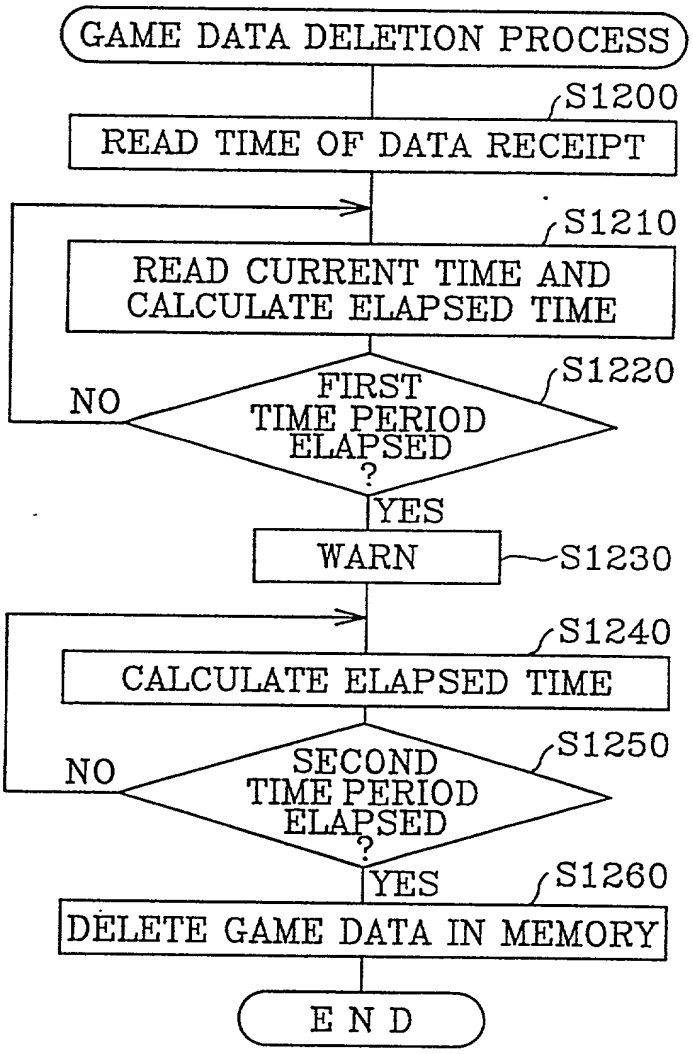

GAME DATA DELETION PROCESS
S1200
READ TIME OF DATA RECEIPT
S1210
READ CURRENT TIME AND CALCULATE ELAPSED TIME
S1220
FIRST TIME PERIOD ELAPSED ?
NO
YES
WARN
S1230
S1240
CALCULATE ELAPSED TIME
S1250
SECOND TIME PERIOD ELAPSED ?
NO
YES
S1260
DELETE GAME DATA IN MEMORY
E N D

FIG.8A

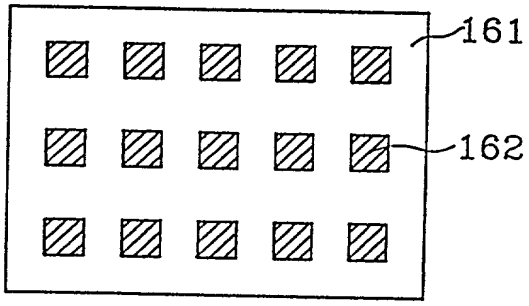


FIG.8B

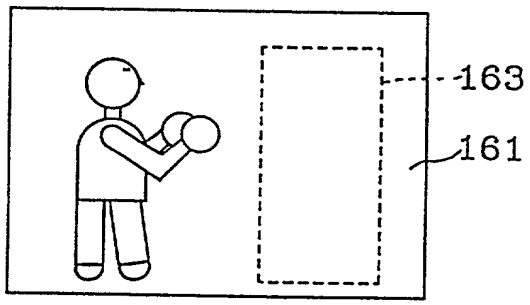


FIG.8C

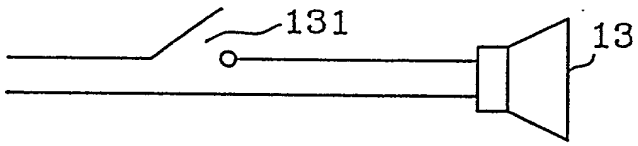


FIG.8D

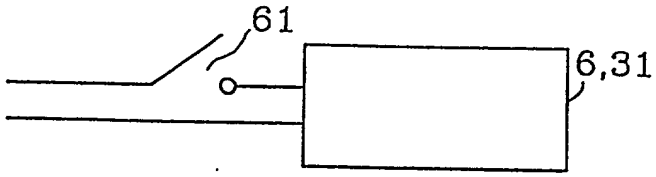


FIG.9

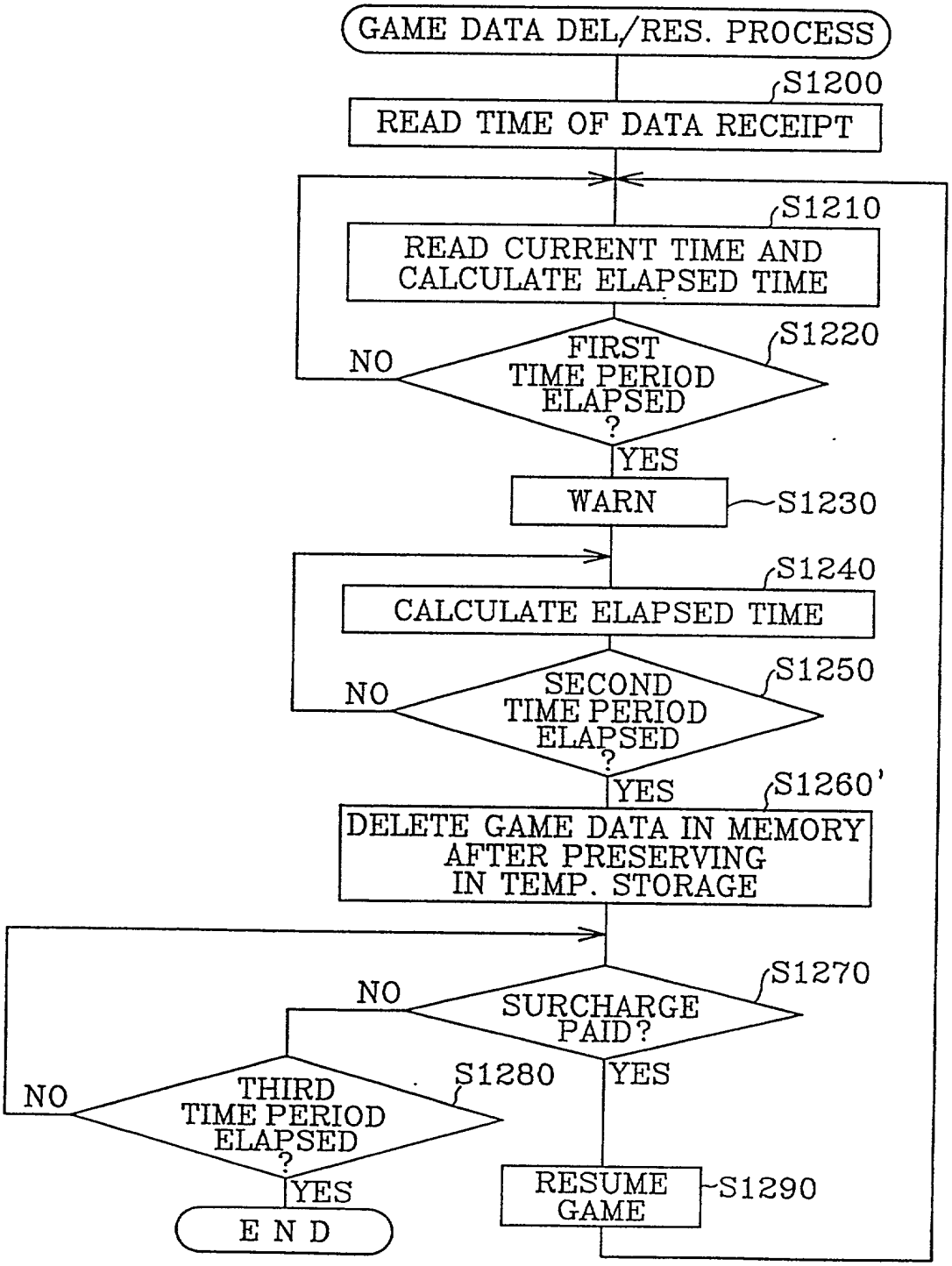

GAME DATA DEL/RES. PROCESS
S1200
READ TIME OF DATA RECEIPT
S1210
READ CURRENT TIME AND CALCULATE ELAPSED TIME
S1220
NO
FIRST TIME PERIOD ELAPSED ?
YES
WARN
S1230
S1240
CALCULATE ELAPSED TIME
S1250
NO
SECOND TIME PERIOD ELAPSED ?
YES
S1260'
DELETE GAME DATA IN MEMORY AFTER PRESERVING IN TEMP. STORAGE
S1270
NO
SURCHARGE PAID?
YES
S1280
NO
THIRD TIME PERIOD ELAPSED ?
YES
END
RESUME GAME
S1290

FIG.10

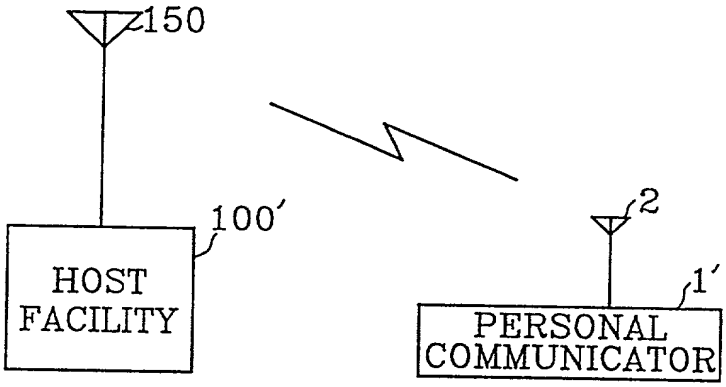

150
100'
HOST FACILITY
2
1'
PERSONAL COMMUNICATOR

FIG.11

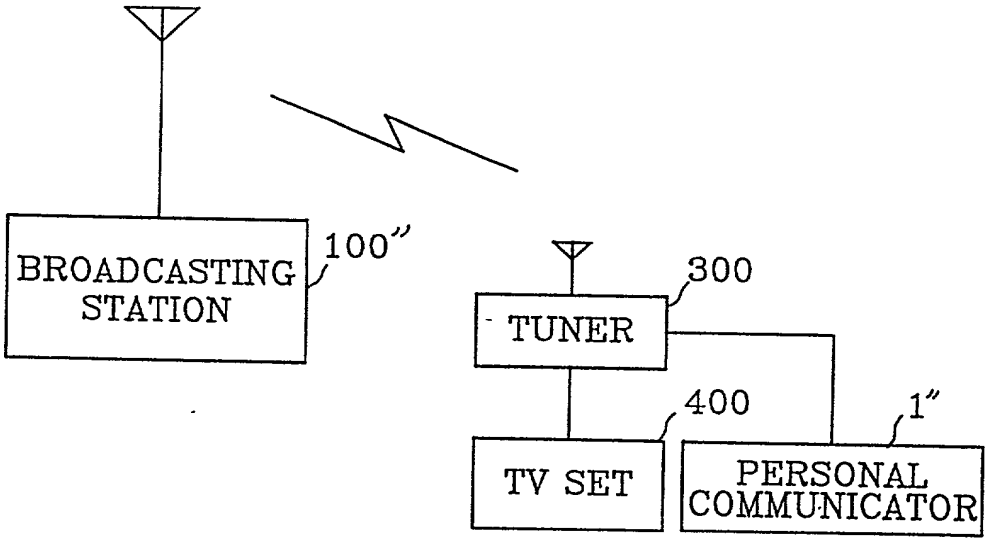

BROADCASTING STATION
100"
300
TUNER
400
TV SET
1"
PERSONAL COMMUNICATOR

FIG. 12

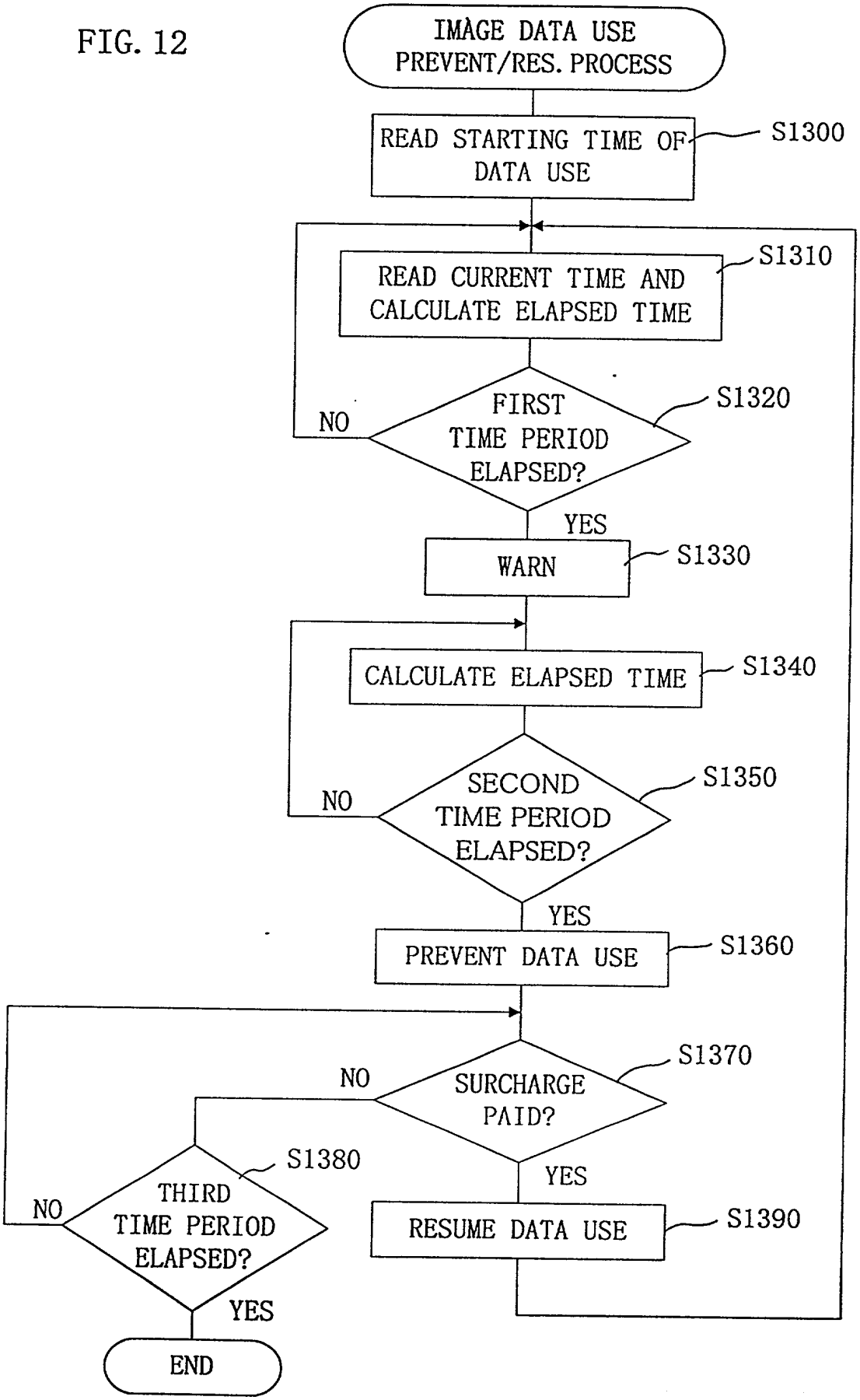


IMAGE DATA USE PREVENT/RES. PROCESS
READ STARTING TIME OF DATA USE
S1300
READ CURRENT TIME AND CALCULATE ELAPSED TIME
S1310
FIRST TIME PERIOD ELAPSED?
S1320
NO
YES
WARN
S1330
CALCULATE ELAPSED TIME
S1340
SECOND TIME PERIOD ELAPSED?
S1350
NO
YES
PREVENT DATA USE
S1360
SURCHARGE PAID?
S1370
NO
YES
THIRD TIME PERIOD ELAPSED?
S1380
NO
YES
RESUME DATA USE
S1390
END

FIG. 13

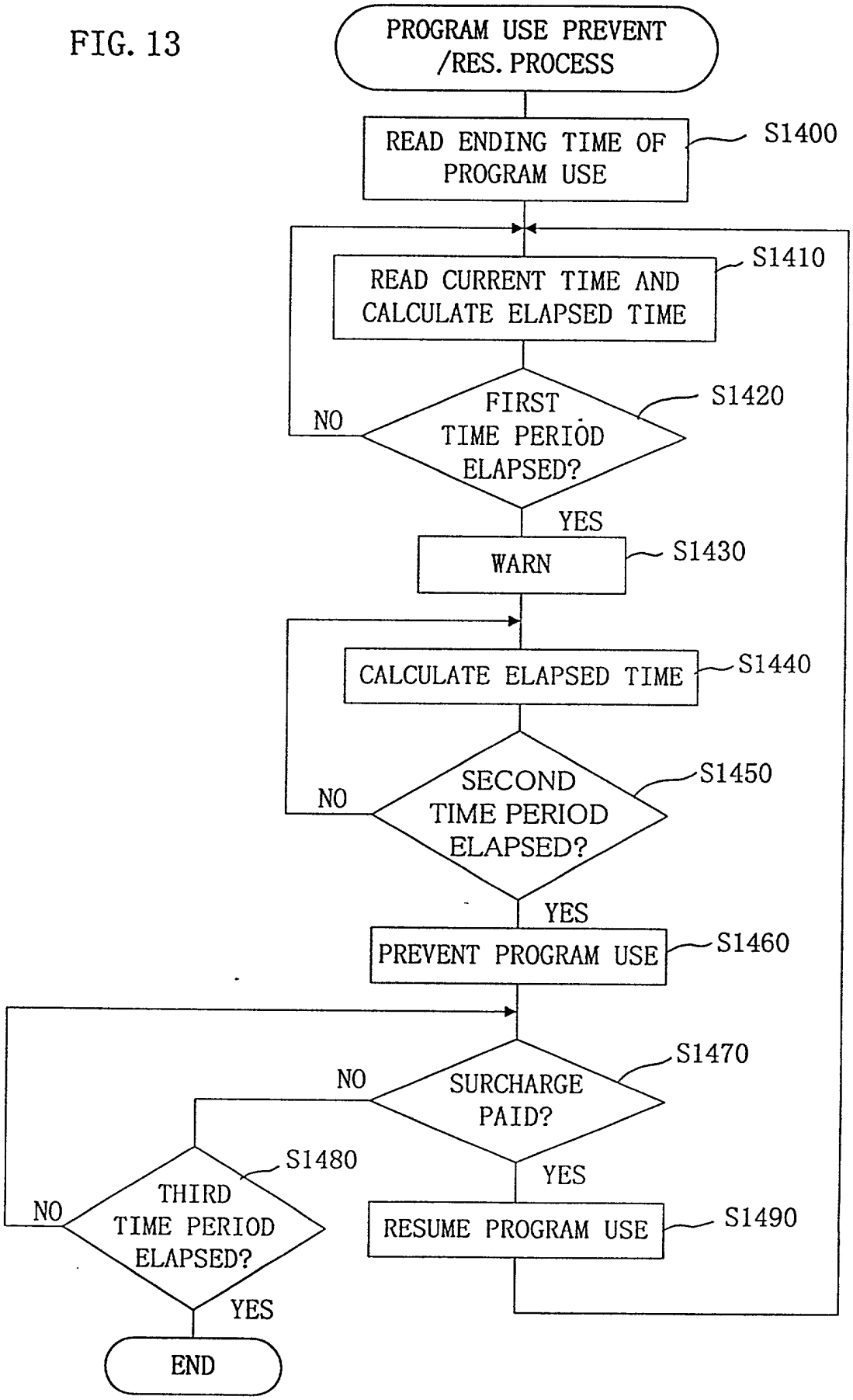
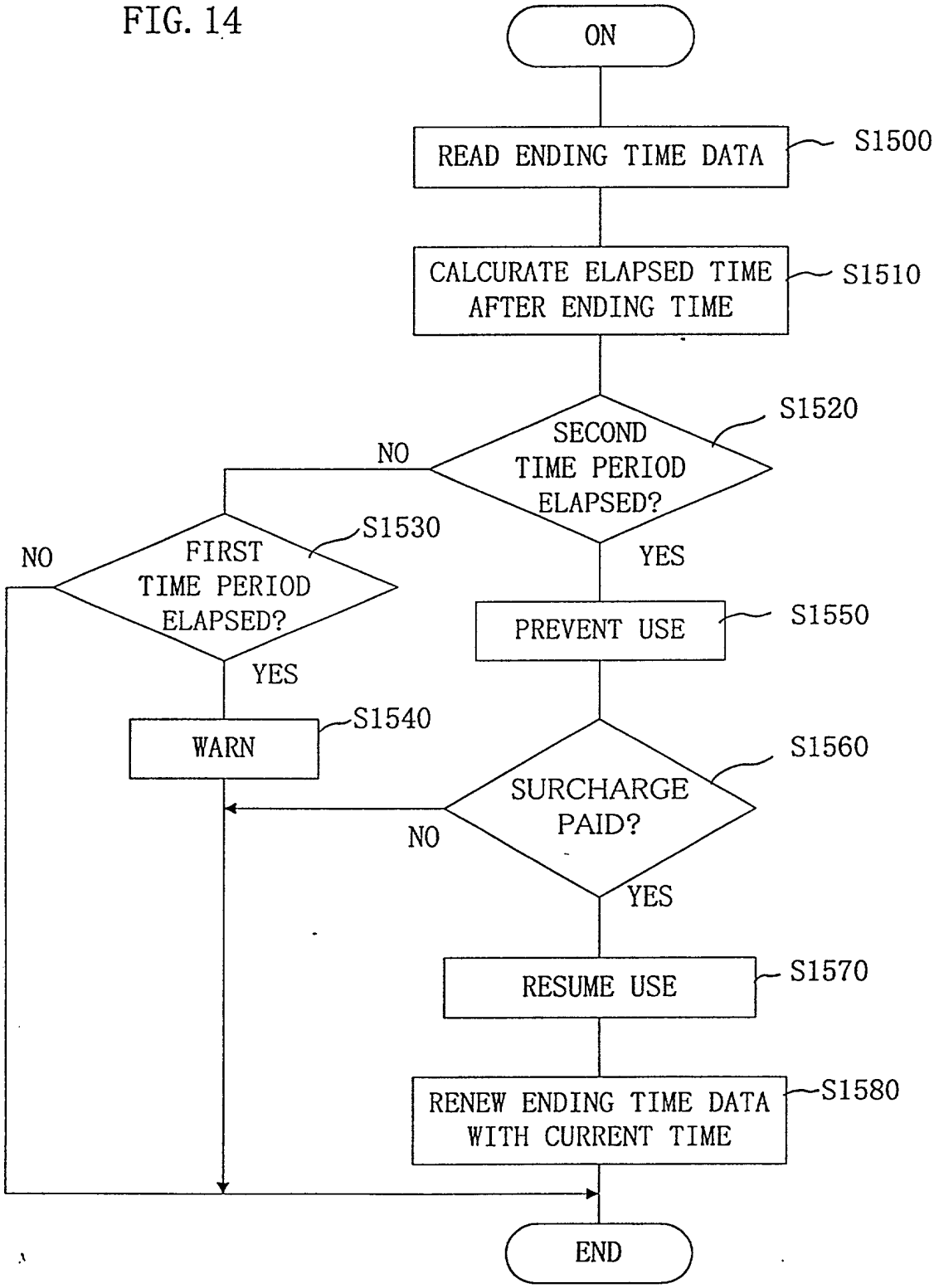

PROGRAM USE PREVENT /RES. PROCESS
READ ENDING TIME OF PROGRAM USE
S1400
READ CURRENT TIME AND CALCULATE ELAPSED TIME
S1410
FIRST TIME PERIOD ELAPSED?
S1420
NO
YES
WARN
S1430
CALCULATE ELAPSED TIME
S1440
SECOND TIME PERIOD ELAPSED?
S1450
NO
YES
PREVENT PROGRAM USE
S1460
SURCHARGE PAID?
S1470
NO
YES
THIRD TIME PERIOD ELAPSED?
S1480
NO
YES
RESUME PROGRAM USE
S1490
END

FIG. 14


ON
READ ENDING TIME DATA
S1500
CALCURATE ELAPSED TIME AFTER ENDING TIME
S1510
SECOND TIME PERIOD ELAPSED?
S1520
NO
YES
FIRST TIME PERIOD ELAPSED?
S1530
NO
YES
PREVENT USE
S1550
WARN
S1540
SURCHARGE PAID?
S1560
NO
YES
RESUME USE
S1570
RENEW ENDING TIME DATA WITH CURRENT TIME
S1580
END

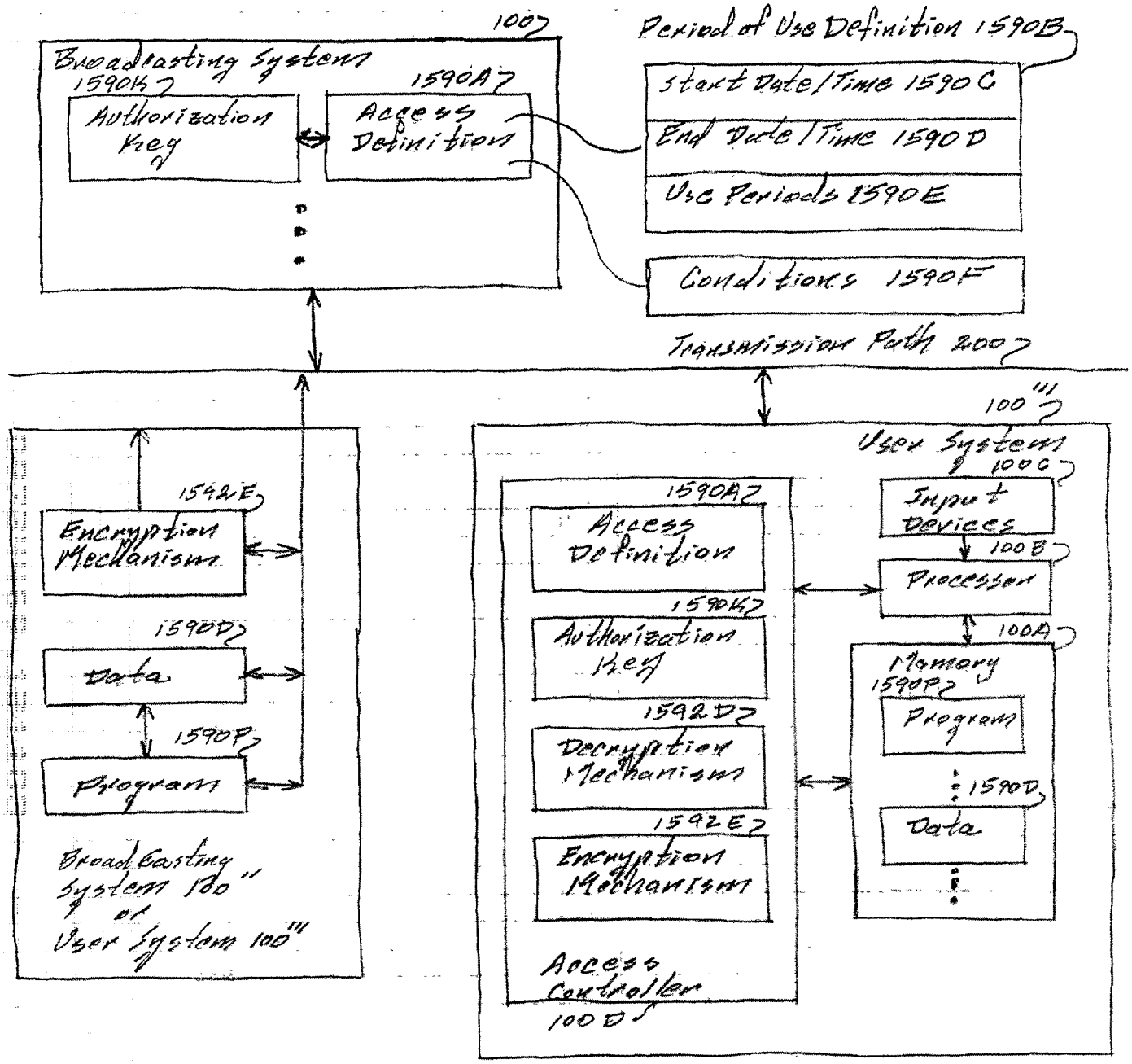

100
Broadcasting System
1590K
Authorization Key
1590A
Access Definition
Period of Use Definition 1590B
Start Date/Time 1590C
End Date/Time 1590D
Use Periods 1590E
Conditions 1590F
Transmission Path 200
100''
User System
100C
Input Devices
100B
Processor
100A
Memory
1590P
Program
1590D
Data
1590A
Access Definition
1590K
Authorization Key
1592D
Decryption Mechanism
1592E
Encryption Mechanism
Access Controller
100D
1592E
Encryption Mechanism
1590D
Data
1590P
Program
Broadcasting System 100' or User System 100''

Fig. 15